

QUARTERLY STATUS REPORT

DATE: 1/30/03

PROJECT: Evaluation of Wildlife Crossing Structures on US Highway 93
Evarto to Polson—Phase 1: Pre-construction data collection and finalization of evaluation
plan

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ANTICIPATED PRODUCTS:

- Memo to Technical Design Committee on monitoring design considerations
 - Animal-vehicle incident reporting system
 - Field Methods and Safety Protocol Handbook
 - Summary of literature and existing data
 - Memo defining the Measures of Effectiveness
 - Long-term Research and Monitoring Evaluation Plan
 - Phase 1 Pre-construction Case Study
 - Pre-construction field data summary report
 - Pre-construction black bear movement and genetics study
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STATUS OF ACTIVITIES AND PRODUCTS (E.G., PROJECT MILESTONES, DELIVERABLES, PRODUCT DISSEMINATION, RELEVANT DIVISION ACTIVITIES) FOR THE PROJECT:

Previous Quarterly Report submitted October, 2002. This report entails the activities from October 1, 2002 – December 31, 2002.

Ongoing Activities:

- On-going literature search and compilation of relevant data.
- On-going discussions on research issues, direction, and potential partnerships with MDT research manager and district biologist, Confederated Salish and Kootenai Tribes (CSKT) tribal biologist, MSU and University of Montana (UM) Ecology/Wildlife Departments and GIS center, and Salish Kootenai College (SKC)
- On-going work with sub-contractor, Garcia and Associates (GANDA), to establish pre-construction field methods and develop handbook for field methods and protocols.
- On-going motion- & heat-triggered photo monitoring of Montana Rail Link underpass in Evarto study area.
- On-going communication with MDT maintenance crews for purposes of collecting data on animal carcasses resulting from vehicle collisions.

- On-going attendance of US 93 Technical Design Committee meetings to document process of decision-making for wildlife crossings and fencing design issues for case study.

October

- Initiated pilot study to assess use of tracking beds to estimate animal crossings of highway in the Evaro area.
- Met with Pat Hurley at SKC to discuss possible undergraduate thesis project coordination with this project's goals.
- Pulled traffic counters due to snowplowing operations.

November 2002

- Continued tracking bed pilot study, lengthening the existing bed from 50m to 100m and trying different mixture of tracking media. First crossings by deer (2 different events).

December 2002

- Continued tracking bed pilot study. Working on study design and methods to estimate error associated with exposed tracking beds (tracks lost or tracking material not imprinting due to rain, snow, cold, wind, etc). Gathering more information about using infrared video system to estimate error.
- Queried research peers requesting data on animal crossing rates and associated standard deviation to use in power analysis to help determine appropriate number of tracking beds to deploy in order to detect statistical differences in pre- and post-construction crossing rates.
- Researched use of infrared video system to estimate error rates associated with tracking bed exposure to weather elements and to address potential issues with animal behavioral avoidances of tracking beds. WTI is hoping to purchase this equipment with own funds in order to use on this and other projects.
- Initiated drafting Field Methods Handbook.
- Refined schedules and budgets for contract amendment. Pre-construction contract forecasted to extend to end of June 2006 though budget and schedule has not been finalized as of the writing of this quarterly report (January 30, 2003).

Summary:

Efforts to date have been to establish the pre-construction field monitoring methods. Many aspects of the pre-construction monitoring program are in place (bear study, camera sites under existing under-crossing structure, traffic counts, road-kill data collection, tracking bed protocol). The protocols for these data collection efforts are being refined and the databases and quality assurance/quality control systems are being established and will be documented in the Field Methods Handbook. WTI is attending TDC meetings to collaborate on design in terms of monitoring and to document decision-making processes related to wildlife mitigation for the case study. WTI is finalizing the budget and schedule in order to amend the contract with MDT for the entire \$562,500.